

9 June 2014

**Via Email and Federal Express**

Ms. Sharon Fang (3H521), Remedial Project Manager  
U.S. Environmental Protection Agency – Region III  
1650 Arch Street  
Philadelphia, PA 19103

**Subject: Revised Response Action Plan (RAP) for Vapor Intrusion (VI) Assessment dated 9 June 2014, and Responses to 2 June 2014 USEPA Comment Letter Operable Unit 2 North Penn Area 5 (NP5OU2) Superfund Site Administrative Settlement and Order on Consent for Removal Response Action Docket No. CERC-03-2014-0060AC**

Dear Ms. Fang:

On behalf of Stabilus, Inc., please find enclosed three (3) copies of the revised Response Action Plan (RAP) dated 9 June 2014 to fulfill the requirements of Section VIII Paragraph 44 of the Administrative Settlement and Order of Consent for Removal Response Action Docket No. CERC-03-2014-0060AC dated 14 March 2014 (Settlement Agreement) for a vapor intrusion (VI) assessment to be performed at the Constantia-Colmar, Inc. facility building located at 92 County Line Road in Colmar, Pennsylvania. A redlined version of the revised RAP text was submitted via electronic mail. Included herein are responses to the 2 June 2014 USEPA comments and a request to defer the submittal of monthly progress reports (MPRs).

**RESPONSE TO COMMENTS**

Below is a summary of the responses to comments to the RAP that were provided by USEPA in a letter dated 2 June 2014 (note: USEPA's comment is presented in italicized text followed by the response):

**General Comments**

***Comment 1:** Based upon the proposed RAP schedule, it is highly uncertain that the sampling could be performed in the heating season. Therefore, we are providing these comments for incorporation into a final RAP so that samples can be taken in November 2014. Please insert language in Section 8.0, Schedule that states sub-slab samples be collected in November when*

*the building is being consistently heated. Also, state that the samples shall not be taken unless the facility is consistently heating the building during the event.*

**Response:** Agreed, text has been modified as requested.

**Comment 2: Locations.** *Please include the footprint of the plume on Figure 4. Additionally, EPA suggests that the sampling locations are staggered in an arc, mimicking the drawn interpretation on the plume extent under the building. A map is attached suggesting revised locations consistent with this comment. In addition, the samples should be no less than 8 feet from the edge of the building.*

**Response:** Agreed. Please note that Figure 4 within the RAP already includes the footprint of the OU2 overburden groundwater plume, we assume the comment is meant to modify Figure 5. Figure 5 has been modified as suggested, and samples will be collected greater than 8 feet from the edge of the building which will be verified in the field.

**Comment 3: Analysis.** *Include all TCE breakdown products and ROD COCs in the chemical analysis [Table 4, RAP; Table 4, and QAPP]. The list of target compounds for this assessment does not include the breakdown products that may be generated during biodegradation.*

**Response:** Per Table 2 in the ROD, the following compounds will be included in the chemical analysis as summarized on Table 1 in the Revised RAP and Appendix A, Table 4 in the revised Quality Assurance Project Plan (QAPP):

- tetrachloroethene;
- trichloroethene;
- 1,1,1-trichloroethane;
- 1,1-dichloroethene;
- cis-1,2-dichloroethene;
- trans-1,2-dichloroethene;
- 1,2-dichloroethane; and
- vinyl chloride.

**Comment 4: Supplemental RAP.** *Provide a list of items that will be included in the Supplemental RAP 1) if additional sampling is chosen and 2) if preemptive mitigation is chosen. For example, the additional sampling RAP should include the trigger for mitigation, type, location and number of samples to be taken as part of the additional investigation. The preemptive mitigation Supplemental RAP should include the proposed design for the mitigation system and the performance standard (locations, analytical level, and when samples will be taken) by which the mitigation system will be deemed successful. For either path, the following should be included: schedule for implementation, schedule for final report, and next steps (i.e.*

*mitigation for sampling path, or schedule for post-construction monitoring for preemptive mitigation).*

**Response:** A RAP Supplement will not be prepared if the sub-slab soil gas sampling results are below the screening levels; thus, no further investigation and no further action is necessary with regard to the VI pathway, and the Final Report will be submitted without the need for a RAP Supplement. Assuming one or more sub-slab soil gas sampling results from this initial sampling event are above screening levels and depending upon the results, the Respondents will then determine if (1) additional sampling is necessary or (2) preemptive mitigation is necessary. Subject to such determination, the items anticipated to be included in the two types of RAP Supplements are as follows:

- (1) **if additional sampling is chosen:** The number of sub-slab soil gas sampling locations would be based upon the number and location of the initial sub-slab soil gas sampling results above screening levels. By way of example only, if only one location is above screening level near the OU2 overburden groundwater plume (i.e., southern wall of Facility), the extent of further investigation may only require one additional sub-slab soil gas sampling point stepping into the building (i.e., north) near the point of observed exceedence. Given the multitude of potential sampling outcomes, the dynamics cannot be provided at this time as they will require Respondents' consideration of the observations and the pathway forward. Regardless of the results, if the Respondents agree to additional sampling, the schedule of implementation, final reporting and next steps are assumed to be as follows:
  - **Schedule of implementation:** The RAP Supplement for additional sampling would be submitted 10 business days following notification of results to USEPA. The notification of results to USEPA from the initial sampling event is anticipated to be provided 30 business days following submittal of samples to the laboratory. Thus the RAP Supplement for additional sampling would be submitted 40 business days after submittal of samples to the laboratory of the initial VI samples. As requested, the RAP Supplement would include a trigger for mitigation, type, location and number of samples to be taken as part of the additional investigation.
  - **Final Reporting:** The notification of sampling results from the additional sampling would be provided 30 business days following sample submittal to the laboratory for analysis of the additional VI samples. The Final Report would be completed 28 days following the notification of additional sampling analytical results to USEPA if mitigation is not triggered; otherwise, another RAP Supplement would be prepared similar to the one in "(2) if preemptive mitigation is chosen" as noted below.
  - **Next Steps:** Results would direct the location and breadth of a potential mitigation system. The design of the mitigation system would be similar to "(2) if preemptive mitigation is chosen" as noted below.

- (2) **if preemptive mitigation is chosen:** The type of preemptive mitigation system would require field design testing including but limited to high volume sampling, building pressure cycling, vacuum monitoring, etc. The performance locations to monitor sub-slab vacuum or positive pressure differential is maintained cannot be provided, given the breadth of the preemptive mitigation system needed is currently unknown given the absence of the field design testing.
- **Schedule of implementation:** If preemptive mitigation is deemed necessary, the RAP Supplement for preemptive mitigation would be submitted within 30 business days of notification of the initial sub-slab soil gas sampling results. As noted previously, the notification of results to USEPA from the initial sampling event is anticipated to be provided 30 business days following submittal of samples to the laboratory. Thus the RAP Supplement for preemptive mitigation would be submitted 60 business days following submittal of samples to the laboratory of the initial VI samples.
  - **Final Reporting:** The Final Report for preemptive mitigation system will be submitted within 28 days following execution and collection of the initial performance monitoring of the implemented preemptive remedy. Further details regarding the schedule regarding the preemptive mitigation system execution and collection of initial performance monitoring is provided within Section 8 of the revised RAP.
  - **Next Steps:** Schedule for initial performance monitoring will be based solely upon the maintaining of either a vacuum if sub-slab depressurization is selected, or maintaining of positive building pressure if HVAC system operation modification is selected. The monitoring will be detailed within the remedial design if the PRPs select preemptive mitigation, but are anticipated to be monthly monitoring of pressure/vacuum levels for the first 12-months of operation to verify maintaining of the vacuum/pressure through the various seasonal changes. Further details regarding the schedule are provided within Section 8 of the revised RAP.

**Comment 5: Schedule.** EPA could be consulted after the sub-slab sampling results, however, the decision to perform additional sampling or proceed to preemptive mitigation is the PRPs. State the timeframe in which this “Notification” will be communicated to EPA, e.g. 10 business days after the preliminary data is received, and state the remaining schedule for both options contingent up on this notification, e.g. RAP Supplement for additional sampling will be submitted within 10 business days of notification, or RAP Supplement/final design for preemptive mitigation will be submitted within 30 business days of notification.

**Response:** USEPA will be notified following receipt of validated data results, which is anticipated to be 30 business days after the submittal of samples to the laboratory. The remaining schedule for both potential options is anticipated to be as follows:

- (1) **if additional sampling is chosen:** the RAP Supplement for additional sampling will be submitted within 10 business days of notification to USEPA (i.e., 40 business days following submittal of initial VI samples to the laboratory);
- (2) **if preemptive mitigation is chosen:** the RAP Supplement for preemptive mitigation will be submitted within 30 business days of notification to USEPA (i.e., 60 business days following submittal of initial VI samples to the laboratory). The RAP Supplement will layout the steps of the preemptive mitigation system remedial design. As noted in Section 8 of the revised RAP, the remedial design for the preemptive mitigation system is anticipated to require both a Preliminary (30%) and Pre-Final (90%) Remedial Design. These are necessary to perform testing in the field which may include but not limited to building flow dynamics, assessment of existing HVAC systems, high volume sampling, building pressure cycling, vacuum monitoring, etc. These results would be documented in the remedial design.

***Comment 6: Schedule.** Constantia concurrence on decision points and deliverables should be performed prior to submittal to EPA.*

**Response:** Agreed.

### **Vapor Intrusion Specialists' Comments**

***Comment 7: Section 3.2** states that a comprehensive list of COCs for OU2 at the Site is summarized on Table 1. Table 1 lists as COCs, 1,1-dichloroethene, 1,2-dichloroethane, PCE and TCE. It does not list the breakdown products of TCE, namely cis-1,2-DCE and vinyl chloride. These compounds and any other breakdown products of the primary COCs should be included on the table. At a minimum the analytes cis-1,2-dichloroethene and vinyl chloride should be added since they are listed in Appendix B – Health and Safety Plan (Appendix D – Constituents of Concern). Adding additional analytes will also require revision to Section 4.6 Analytical Methods. Please note that the listed laboratory detection limits in Table 1 may not be adequate for indoor air sampling. If indoor air sampling is necessary, EPA Region 3 may request that laboratory analysis be performed with TO-15 SIM to achieve necessary detection limits. (Section 3.5 of the QAPP will need to be updated to remain consistent with any changes made to Table 1.)*

**Response:** As noted in response to Comment 3, per Table 2 in the ROD, the following compounds will be included in the chemical analysis as summarized on Table 1 in the RAP and Appendix A, Table 4 in the QAPP:

- tetrachloroethene;
- trichloroethene;
- 1,1,1-trichloroethane;
- 1,1-dichloroethene;

- cis-1,2-dichloroethene;
- trans-1,2-dichloroethene;
- 1,2-dichloroethane; and
- vinyl chloride.

**Comment 8: Section 4 - Field Sampling Plan (FSP).** *The proposed locations of the 6 sub-slab sampling points within the southern third of the Facility are shown on Figure 4. From Figure 4 it appears that at least 3 of the sampling points are within 6 feet of the edge of the building – which is not ideal to ensure that atmospheric air is not diluting the sample. Please confirm that the sub-slab sampling ports are at least 8 feet away from the edges of the building by adding this language into the RAP and confirming this in the field.*

**Response:** Per response to Comment 2, Figure 4 within the RAP already includes the footprint of the OU2 overburden groundwater plume. We assume the comment is meant to modify Figure 5. Figure 5 has been modified and samples will be collected greater than 8 feet from the edge of the building which will be verified in the field.

**Comment 9: Section 4.3 - Temporary Sub-Slab Gas Probe Installation and Testing, Page 8, second paragraph.** *The paragraph mentions the weather data that will be collected during the sampling period. However, the section does not mention the weather conditions when samples should not be collected. Please add these into the RAP.*

**Response:** The weather conditions, namely temperature, have been added to Section 4.3 of the RAP.

**Comment 10: Section 4.3 - Temporary Sub-Slab Gas Probe Installation and Testing.** *Section 3.1, Conceptual Site Model states, “The soils within the OU2 overburden are characterized by low permeability based upon observations and measurements made during completion of the PDI. This low permeability limits the lateral and vertical movement of vapor within the subsurface.” Because of the expected low permeability of the soils, EPA Region 3 recommends an equilibration time of 2 - 6 hours after a subslab sampling port is fully installed and before the sample is collected - consistent with the EPA Superfund Vapor Intrusion FAQs, February 2012.*

**Response:** This is not consistent with our experience; however, we will allow the installed soil gas points to equilibrate for a minimum period of 2 hours as requested.

**Comment 11: Section 4.3 - Temporary Sub-Slab Gas Probe Installation and Testing** *Due to the necessary length of the equilibration time, and the time it will take to collect a meaningful subslab sample, EPA does not believe that modeling clay will be sufficient to ensure that the subslab sampling ports do not leak. A more permanent seal will be required. The MSDS for*



*Bentonite Pellets and Quikrete were included in Appendix F of the Health and Safety Plan. Are either of these materials intended to be used as an alternative to modeling clay?*

**Response:** Though Geosyntec has success using modeling clay, anchoring cement will be used to seal the sub-slab soil gas points. As noted in the RAP, a tracer test using helium will also be completed to confirm the sub-slab sampling points are sealed.

**Comment 12: Section 4.4 - Soil Gas Sample Collection** *While there is no national guidance stating the length of time the samples should be collected, EPA Region 3 requests for this building that the subslab samples be collected at least over 1 hour in a 6 Liter canister. The 200 mL/min flowrate for sample collection (approximately 30-minute grab samples if 6 Liter canisters are used, approximately 5-minute grab samples if 1 Liter canisters are used) will not be adequate to collect a meaningful sample if the soils are of low permeability.*

**Response:** Test methods and associated text within the RAP have been modified as requested.

**Comment 13: Section 5.1 - Sample Containers and Preservation** *Again, EPA requests that 6 Liter canisters be used for sample collection and not the 1 Liter canisters that are proposed in the RAP.*

**Response:** Text within the RAP has been modified as requested.

**Comment 14: Section 8 – Schedule.** *EPA may decide that more than 8 subslab soil gas and collocated indoor air samples may be needed to assess the building. EPA requests that the phrase, “8 locations,” be changed to, “8 or more locations.”*

**Response:** Text within the RAP has been modified; however, the final number of samples will be documented within the RAP Supplement.

**Comment 15: Appendix A - Quality Assurance Project Plan (QAPP) Addendum** *All changes that EPA Region 3 has requested in the RAP must be reflected in the QAPP Addendum for consistency.*

**Response:** Changes requested by EPA Region 3 within the RAP have been incorporated into the QAPP as requested.

**Comment 16: Appendix A, Section 5.1 - Project Quality Assurance/Quality Control.** *Please state whether the canisters will be individually certified to be clean or batch certified.*

**Response:** As noted in Section 4.4 of the RAP, the Summa™ canisters will be batch certified. Appendix A, Section 5.1 has been updated.

**Comment 17:** *Appendix A, Section 5.3 - Leak Prevention and Testing. This section must be updated to include an alternative method to the use of modeling clay to seal the sub-slab sampling ports.*

**Response:** As noted in response to Comment 11, anchoring cement will be used to seal the sub-slab sampling points and Appendix A, Section 5.3 has been updated.

**Comment 18:** *Appendix A, Section 5.4 - Duplicate Samples. Please state definitively the number of duplicate samples that will be collected. From the description of 1 per 20 investigative samples for VOC and fixed gases analyses, it can be assumed that only 1 duplicate sample will be collected. Please note that EPA requests a duplicate collection frequency of 1 per 10 investigative samples. For subslab samples, the duplicate will be collected using a “T” fitting. EPA wants to ensure that the same flowrate is used to collect the duplicate samples as the other samples – even if it increases the collection time.*

**Response:** Duplicate collection frequency will be modified as requested to be 1 per 10 investigative samples, and the sampling method noted is the same method Geosyntec uses to collect a duplicate VI sample. Given six (6) sub-slab soil gas samples will be collected, one (1) duplicate sample will be collected with this initial VI sampling event.

**Comment 19:** *Appendix A, Section 5.5 - Summa Canister Vacuum Check. Other than the Summa canister vacuum check, the QAPP Addendum does not state any conditions or limitations on where or when samples should be/should not be collected or any conditions that would make a sample invalid. Please revise the QAPP Addendum to include this information.*

**Response:** The Summa™ Canister Vacuum Check is to assess the condition of the Summa™ Canister provided from the laboratory to ensure sufficient vacuum to collect a valid soil gas sample. Other test methods are referenced in Appendix A, Section 5.3 and refer to the revised RAP including helium tracer testing, shut-in testing, monitoring of soil gas values via PID and landfill gas meter are used to assess the quality of the sample collected and assure the sample is collected from the subsurface and not of ambient air.

**Comment 20:** *Appendix A, Table 3 should be updated to change the reference from use of 1-Liter Summa canisters to 6-Liter Summa canisters.*

**Response:** Updated.



**Comment 21:** *Appendix A, Table 4 should be updated to include TCE breakdown products as mentioned above.*

**Response:** As noted in response to Comment 3, Table 1 and Appendix A, Table 4 have been updated to include the compounds listed in Table 2 of the ROD as follows:

- tetrachloroethene;
- trichloroethene;
- 1,1,1-trichloroethane;
- 1,1-dichloroethene;
- cis-1,2-dichloroethene;
- trans-1,2-dichloroethene;
- 1,2-dichloroethane; and
- vinyl chloride.

**Comment 22:** *Appendix A, Table 6 should be updated to change the duplicate sampling frequency to 1 per 10 samples.*

**Response:** Updated.

**Comment 23:** *Appendix B - Building Information Form. EPA expects this form to be customized for the Constantia Building and any other building that may need to be sampled for vapor intrusion.*

**Response:** The form is generic to ensure that information is gathered pertinent to VI investigations. Observations will be noted during the building walk through prior to the VI sampling event.

**Comment 24:** *Section 4.3 Third paragraph discusses the use of modeling clay around the sampling port. The effectiveness of using clay for this seal should be discussed, as it could cause problems with helium leak testing in the field.*

**Response:** As noted in response to Comment 11, anchoring cement will be used to seal the sub-slab sampling points.

**Comment 25:** *Table 1 – TCA RL > RSL for IA samples.*

**Response:** For the compounds that have a reporting limit (RL) above the regulatory screening level (RSL), the TO-15 SIM method will be completed for indoor air (IA) samples as noted in Comment 7 and will be documented within the RAP Supplement if additional sampling is deemed necessary by the Respondents.

**Comment 26:** *Figure 4 – does the plume extend onto the adjacent property and underlie the building located on this parcel.*

**Response:** No.

**Comment 27:** *Appendix D.2 – what material will be used to help seal the shroud to the floor?*

**Response:** The shroud is seated on a level concrete floor; thus sealing of the shroud is not required. Though not necessary, visual gaps will be leveled and sealed with modeling clay if observed.

### **Hydrogeologist Comments**

**Comment 28:** *The breakdown products of TCE have not been included in Table 4. At a minimum, 1,2-DCE and vinyl chloride should be included for analysis.*

**Response:** As noted in response to Comment 3, Table 1 and Appendix A, Table 4 have been updated to include the compounds listed in Table 2 of the ROD as follows:

- tetrachloroethene;
- trichloroethene;
- 1,1,1-trichloroethane;
- 1,1-dichloroethene;
- cis-1,2-dichloroethene;
- trans-1,2-dichloroethene;
- 1,2-dichloroethane; and
- vinyl chloride.

**Comment 29:** *It is not clear how the sampling locations were chosen. Please include the footprint of the plume on Figure 4. Additionally, it is suggested that the sampling locations are staggered in an arc, mimicking the drawn interpretation on the plume extent under the building. A suggested map is provided with these comments.*

**Response:** Per response to Comment 2, Figure 4 within the RAP already includes the footprint of the OU2 overburden groundwater plume. We assume the comment is meant to modify Figure 5. Figure 5 has been modified.

**Comment 30:** *Leak testing should occur both at the beginning and end of the sampling to verify no leakage from the modeling clay used to seal the hole.*

**Response:** Helium tracer testing following sampling as been added.

### **Ft. Meade Comments**

**Comment 31:** *[Section 6.1 Data Reduction, Validation, Verification, Usability, QAPP] The person who will be performing the validation should be named in the document. Their affiliation and qualifications should be included in this section.*

**Response:** Julia Klens Caprio will be leading the validation of the data with assistance from Mary Tyler as shown on Appendix A, Figure 1. Appendix A, Section 6.1 has been updated, and their credentials are included as an attachment to the QAPP.

**Comment 32:** *[Table 2, QAPP] It is recommended that along with the other screening procedures outlined, a temperature probe be inserted into the bore hole for the vapor intrusion sampling.*

**Response:** Temperature will be collected as part of the sub-slab sampling event.

**Comment 33:** *[Section 4.2 Building Survey] If the PID should find a potential source in the building; consideration should be given to taking an internal summa canister sample to document the identity of the contamination. The PID can indicate the presence of, but cannot identify the component.*

**Response:** Indoor air sampling will not be completed prior to or in conjunction with the initial sub-slab soil gas sampling event.

**Comment 34:** *[Page 7, RAP] Figure 4 is a typo, the correct figure to reference is Figure 5.*

**Response:** Text has been modified.

**Comment 35:** *[Signature Page, QAPP] Terry Simpson is included on the list for an approval signature. Sharon Fang is the sole representative with EPA authority who approves Site documents. Please remove Ms. Simpson's signature line.*

**Response:** QAPP signature page has been updated as suggested.

### **RPM Comments**

**Comment 36:** *Page 5, last paragraph is speculative. Please remove. The assessment with confirm or deny whether vapors are migrating into the building, regardless of the soil type or permeability.*

**Response:** Removed.

**Comment 37: Page 6, Section 3.4** states that screening level will be utilized for the six sub-slab soil gas samples. Should this screening level be applicable to the all sub-slab soil gas samples, even if additional samples are taken?

**Response:** Yes, text has been modified.

**Comment 38: Page 7, Section 4.1** states that a building survey will be completed. Complete the building survey and submit the information in the revised RAP. Also, add into the schedule the confirmation and updating of the survey results within 30 days of performing the subslab sampling.

**Response:** As noted in the RAP, a building survey will be completed as part of the initial VI investigation. Due to the need for access agreements and consensus with Constantia for transfer of their proprietary information, a building survey has not been conducted to date; however, if USEPA requires a building survey be completed prior to the initial VI sampling this can be arranged. As noted in response to Comment 1, the initial VI sampling event is anticipated to be completed in November 2014 or later once the building is consistently heated.

**Comment 39: Page 8.** Any changed locations should be coordinated and approved by EPA or EPA's field representative.

**Response:** Agreed.

**Comment 40: Page 8.** Section 4.3, second paragraph states "The information may be measured with on-site equipment or obtained from a reliable source of local measurements (e.g., a local airport)." Disclose which parameters will be recorded using on-site equipment and which will be recorded using other measurements. Also state where these measurements will be obtained, e.g. the name of the airport or weather station and how far it is from the site.

**Response:** The information measured on-site will be the building and sub-slab soil gas temperature. The closest airport data is the Doylestown Airport (Station identification: KDYL; <http://w1.weather.gov/data/obhistory/KDYL.html>). Parameters to be collected / monitored from the local weather station may include barometric pressure, temperature, humidity, rainfall, wind speed and wind direction.

**Comment 41: Page 13, Section 6.2.** Delete the reference to the RAP Supplement being submitted to EPA on an “expeditious basis.” State a timeframe for the Final Report for each RAP Supplement scenario in this document. Also make these same changes in Section 8.0.

**Response:** See response to Comment 5.

**Comment 42: Page 14, Section 6.2** Last sentence states the final Report will not be submitted until the completion of the tasks noted in the RAP Supplement. State the timing of the submittal for each option, e.g. if additional sampling is warranted and found to trigger mitigation, the Final Report will be submitted X days after the mitigation system is installed and tested, etc.

**Response:** The timing of the RAP Supplement submittals are discussed in the response to Comment 5. The three scenarios are potentially as follows:

- 1) **Sub-slab soil gas sampling results are below the screening values:** The Final Report will be submitted within 28 calendar days from receipt of validated analytical results. As noted, validated data and notification of sampling results to USEPA is anticipated to be 30 business days following submittal of samples for analysis to the laboratory.
- 2) **Sub-slab soil gas sampling results are above screening levels and PRPs conclude additional sub-slab soil gas and indoor air sampling is necessary:** The Final Report for the supplement sampling will be submitted within 28 calendar days from receipt of validated additional sampling analytical results. The notification of additional sampling results is anticipated to be 30 business days following submittal of samples for analysis to the laboratory. If the additional sampling results are found to require mitigation, then the timing for the Final Report will be similar to (3) below.
- 3) **Sub-slab soil gas sampling results are above screening levels and PRPs conclude that preemptive mitigation is deemed necessary:** The Final Report will be submitted within 28 days following execution of the initial performance monitoring of the implemented preemptive remedy. As noted in response to Comment 5, the RAP Supplement of the mitigation system will be submitted within 30 days of notification to USEPA. As presented in Section 8 of the RAP, the Preliminary (30%) RD of the preemptive mitigation system will be submitted within 90 days of USEPA approval of the RAP Supplement, and the Pre-Final (90%) RD of the preemptive mitigation system will be submitted within 90 days of USEPA approval to the 30% RD. Implementation scheduling of the preemptive mitigation system will require Constantia concurrence and the implementation and performance monitoring schedule will be outlined within the 90% RD submittal. Once the 90% RD is approved by USEPA, the Final (100%) RD will be submitted within 30 days. The preemptive mitigation system will be installed and implemented, and ability of the system to maintain a vacuum/pressure will be monitored monthly for an anticipated period of 12-months. The Final Report for preemptive mitigation will be submitted

within 28 days following execution of the initial 12-months of performance monitoring of the implemented preemptive remedy.

## **MONTHLY PROGRESS REPORTS**

Per the Settlement Agreement, Geosyntec will submit MPRs beginning on or before the tenth day of the month after receipt of USEPA approval of the RAP. Given the VI assessment will not start until November 2014 or later and thus not much of significance to report, we kindly request that the requirement for submittal of MPRs be delayed until at least October 2014 or after approval of the RAP if later. The Settlement Agreement notes that the MPRs are due every thirty (30) calendar days thereafter; however, we request that the tenth day of each month be set as the due date to simplify preparation.

## **CLOSING**

If you have any questions, please do not hesitate to contact me.

Sincerely,



Derek W. Tomlinson, P.E.  
Project Coordinator

Attachments: Revised Response Action Plan dated 9 June 2014  
Redline Revised Response Action Plan dated 9 June 2014 (*via email only*)

cc: Dennis Kutz, PADEP (*via email & 1 hardcopy first class mail*)  
M. Joel Bolstein, Esq., Fox Rothschild  
Chris Voci, P.G., Geosyntec  
File: PH0013